



# Fact Sheet: BEACH Act Geospatial Dataset

## Background Information

The Beaches Environmental Assessment and Coastal Health (BEACH) Act was passed by Congress in 2000. This act requires coastal and Great Lakes states and territories to report to EPA on beach monitoring, notification and locational data for their coastal recreation waters. The BEACH Act defines coastal recreation waters as the Great Lakes and coastal waters (including coastal estuaries) that states, territories, and authorized tribes (collectively referred to as "states" or "jurisdictions") officially recognize or designate for swimming, bathing, surfing, or similar activities in the water. EPA uses the Program tracking, beach Advisories, Water quality standards, and Nutrients (PRAWN) database to store the notification and beach locational data submitted by states. EPA uses the STORET database to store the beach water quality monitoring and monitoring station location data submitted by the states.



Every year the beach advisory data that is submitted to EPA is summarized in a national summary report. To view these reports visit, <http://www.epa.gov/waterscience/beaches/seasons>.

The Beach Program focuses on the goals of improving public health and environmental protection for beach goers and providing the public with information about the quality of their beach water. This locational data enables the public to accurately associate water quality monitoring and beach advisory data with specific beaches using Internet-based map viewing applications. For more information on the Beach Program visit <http://www.epa.gov/waterscience/beaches/>.

## Collection and Indexing of Beach Location Data

The Beach Program uses the PRAWN database to store beach endpoint (latitude and longitude) data. EPA's Reach Address Database (RAD, <http://www.epa.gov/waters/doc/rad/index.html>) is used to store the indexed location of those endpoints for use by mapping applications. The RAD uses the National Hydrography Dataset (NHD) to provide nationally-normalized beach lengths. Visit the NHD Web site for more information: <http://www.horizon-systems.com/nhdplus/>. The procedure used for this collection and indexing process is explained in <http://www.epa.gov/waterscience/beaches/grants/datausers/2008/ebeaches-location-sop.htm>.

## Quality Control/Quality Assurance of Beach Location Data

The indexed beach location data generated from the latitude and longitude data stored in PRAWN for over 7000 beaches was sent to all jurisdictions for review. The instructions for the review process can be downloaded at: [http://www.epa.gov/waters/doc/Beach\\_Review\\_Tool\\_Instructions.pdf](http://www.epa.gov/waters/doc/Beach_Review_Tool_Instructions.pdf). Not all jurisdictions are included in this first edition of the national BEACH Act Geospatial Dataset. Several territories are not included due to lack of NHD coverage: American Samoa, Commonwealth of the Northern Mariana Islands and Guam. Two jurisdictions, Alaska and Makah Tribe are in the process of providing locational data.

Please note that while the BEACH Act Geospatial Dataset available for download is more current than the 2008 list of beaches, <http://www.epa.gov/waterscience/beaches/list/index.htm> it is not an update to that list, in part because it does not include the beaches for the above-mentioned jurisdictions.



## Using the BEACH Act Geospatial Dataset:

The Geospatial Dataset is available in both GIS shapefile

[http://www.epa.gov/waters/data/rad\\_beach\\_20100511\\_shp.zip](http://www.epa.gov/waters/data/rad_beach_20100511_shp.zip) and ESRI file geodatabase formats  
[http://www.epa.gov/waters/data/rad\\_beach\\_20100511\\_fgdb.zip](http://www.epa.gov/waters/data/rad_beach_20100511_fgdb.zip).

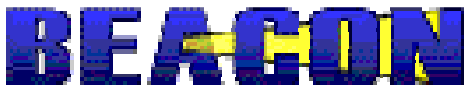
The Beach Act Geospatial data is also available as Google Earth KMZ files. *Note: these are based on state provided latitude /longitude coordinates and unlike the shapefile have not been corrected to display on the shoreline image shown in Google earth. The following jurisdictions are not represented in the KMZ files: Alaska (AK), American Samoa (AS), and Guam (GU).* The files are organized by state and can be used in the free Google Earth application. To use these files download Google Earth from: <http://earth.google.com/download-earth.html>. Download the KMZ file of interest to your hard drive, [http://www.epa.gov/waters/data/beach\\_act\\_kmz.zip](http://www.epa.gov/waters/data/beach_act_kmz.zip). The .zip file includes the 2009 Swimming Season Geospatial Data.xls file which contains data such as Beach ID (assigned by EPA), beach name, county, latitude and longitude coordinates, and length. Open Google Earth, go to File\open, and browse for your file then click open file. In the Google Earth earth side bar, open the jurisdiction folder(s).

The Beaches will be represented by blue lines with pushpins at the start and end points of the beach. Clicking on the pushpins will bring up a text box that contains beach name, EPA Beach ID and County. By defaults the KMZ file is saved in Temporary places, so at end of your session, decide if you want to save in Google Earth.

## Additional Ways to Access BEACH Act Data

The Beach ID can also be used to view beach data on-line in the annual state swimming season reports. To view these reports visit, <http://www.epa.gov/waterscience/beaches/seasons>, select an annual report, select a jurisdiction, open the raw data (XLS) file, and open the Attributes tab.

Using the Beach ID, raw water quality monitoring data can also be downloaded from STORET, <http://www.epa.gov/storet/dbtop.html>. A guide to configuring beach reports can be found at: <http://www.epa.gov/waterscience/beaches/grants/datausers/2008/storetdata.pdf>



Last, you can use the BEACON Web site, [http://iaspub.epa.gov/waters10/beacon\\_national\\_page.main](http://iaspub.epa.gov/waters10/beacon_national_page.main) to find information on a beach of interest by typing in the beach name, or by selecting the state, county and then beach name.

## Contacts

For more information on the BEACH Program or BEACH Geospatial data set contact:

**William Kramer**, BEACH Program IT Lead, US EPA Office of Water. Phone: (202) 566-0385 Email: [kramer.bill@epa.gov](mailto:kramer.bill@epa.gov)

**Amy Wesley-Snider**, BEACH User Support, Training & Outreach, Water and Ecosystems Management Center, RTI International. Phone (919) 316-3711 Email: [alwesley@rti.org](mailto:alwesley@rti.org)

**Erik Richards**, PRAWN Database support, CGI Federal. Phone: (276) 889-8659 Email: [erik.richards@cgifederal.com](mailto:erik.richards@cgifederal.com)